# Type Specimens of Animals and Plants in the Royal British Columbia Museum

Gordon D. Green and Alex E. Peden

A Royal British Columbia Museum Technical Manual

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# Type Specimens of Animals and Plants in the Royal British Columbia Museum

**Gordon D. Green and Alex E. Peden**

## Abstract

Type specimens (except paleontological types) deposited in the Royal British Columbia Museum (formerly the British Columbia Provincial Museum), are listed. These include 32 plants, 77 insects, four millipedes, one sponge, 33 hydrozoans, four anthozoans, one branchiobdellid, 11 polychaetes, 21 crustaceans, 23 molluscs, one echinoderm, 11 fish, one amphibian, three birds, and 24 mammals. Specimens labelled as type specimens for which no citation could be found are not listed.

## Introduction

Since publication of a list of type specimens in the British Columbia Provincial Museum, (now the Royal British Columbia Museum), (Peden and Green 1981), numerous types have been deposited at the RBCM. A recent inventory of all RBCM collections uncovered additional type material not reported in the 1981 paper. Here, we provide an updated list of type material including types not listed in the first publication.

Citation, status, and collection information are given for each species. The definition of type status for each entry is that used in the original description and has not been interpreted by the authors (e.g. "female type" = holotype, allotype?). Collection data is taken from specimen labels except where there is a major discrepancy with the literature. These exceptions are noted when they occur. In some instances label data are minimal, so the reader should refer to the original description. For some species, original descriptions have designated a male "type" and a female "type" and, in such instances, we have made no interpretation as to the status of either specimen (e.g. syntypes, allotypes, or lectotypes). Specimens labeled as "types" for which no published description could be found are not listed.

Type specimens housed at the Royal B.C. Museum have previously been reported by Cowan (1936), Arai (1977) and Peden and Green (1981).

# BOTANY

## POLYPODIOPHYTA

### Polypodiaceae

*Adiantum pedatum* L. var. *subpumilum* W.H. Wagner & K.E. Boydston 1978, Can.J. Bot. 56(15):1727. V94078; Isotype; S of Orchard Pt., Brooks Peninsula, Vancouver Island, B.C., 50° 10′ N, 127° 50′ W, exposed wave and wind battered coastal granitic rocks; June 27, 1977; coll. J. Pojar and F. Boas.

*Dryopteris filix-mas* (L.) Schott x *oreopteris* J. Ewan 1944, Am. Fern J. 34(4):115. *V9555*; Type; Alice Arm. N.E. of Prince Rupert; July, 1934; coll. Lohbrunner and Nichols.

*Polystichum braunii* (Spenner) Fee var. *purshii* x *lonchitis* J. Ewan 1944, Am. Fern J. 34(4):116. *V25545*; Type; Fort Simpson; coll. W.D. Anderson.

## ANTHOPHYTA
## MONOCOTYLEDONAE

### Gramineae

*Elymus ambiguus* Vasey & Scribn. var. *salmonis* C.L. Hitchc. 1969, Vasc. Plants of the Pac. N.W. Univ. Wash. Press 1:558. *V37214*; Type; shale cliffs, 9 mi. S. of Challis, Custer County, Idaho, U.S.A., along E. side of Salmon River; May 31, 1962; coll. C.L. Hitchcock and C.V. Muhlick.

*Festuca idahoensis* Elmer var. *roemeri* Pavlick 1983, Can. J. Bot. 61:350. *V95812*; Holotype; Mt. Finlayson, Vancouver Island, B.C., 48° 29′ N, 123° 32′ W, alt. 425 m, grass bald, southern slope, shallow soil pockets on bedrock; June 28, 1978; coll. L.E. Pavlick. *V95804*; Paratype; Mt. Finlayson, Vancouver Island, B.C., 48° 29′ N, 123° 32′ W, elev. 425 m, grass bald, southern slope, shallow soil pockets on bedrock; June 28, 1978; coll. L.E. Pavlick.

*Festuca rubra* L. ssp. *aucta* f. *pseudovivipara* Pavlick 1985, Phytologia 57:5. *V105938*; Holotype; N of Van Inlet, Queen Charlotte Islands, elev. 760 m, scree meadow on limestone; Sept. 17, 1980; coll. H. Roemer.

*Festuca rubra* L. ssp. *secunda* f. *psilolemma* Pavlick 1985, Phytologia 57:7. *V574*; Holotype; Nootka, B.C., open land; June 29, 1896; coll. J.R. Anderson.

*Festuca rubra* L. ssp. *secunda* var. *mediana* Pavlick 1985, Phytologia 57:8. *V120548*; Holotype; S end of Long Beach, Vancouver Island, B.C., 49° 01′ N, 125° 40.5′ W, in rock crevices of headland exposed to open ocean; July 5, 1982; coll. L.E. Pavlick.

*Festuca saximontana* Rydb. var. *robertsiana* Pavlick 1984, Can. J. Bot. 62(11):2452. *V118657*; Holotype; Taseko Mt. traverse, 51° 16′ N, 123° 30′ W, elev. 2250-2350 m, southern slope, talus slope and relatively flat area; Aug. 12, 1981; coll. L.E. Pavlick.

*Festuca viridula* Vasey 1893, U.S. Dep. Agric., Div. of Botany, Bull. 13, pt. 2. *V133965*; Syntype; Mt. Paddo (Adams.) Washington, elev. 3000-6000 ft.; July 6, 1882; coll. W.N. Suksdorf.

*Festuca viviparoidea* Krajina ex. Pavlick ssp. *krajinae* Pavlick 1984, Can. J. Bot. 62(11):2457. *V115019*; Holotype; Fairy Lake, Liard River Basin, B.C., 57° 20′ N, 123° 56′ W, elev. 5300 ft., upper alpine lake W of camp at western tip of Fairy Lake, bare gravel soil in animal trail; July 26, 1977; coll. G.W. Argus and E. Haber.

*Oryzopsis swallenii* C.L. Hitchc. & Spellenberg 1968, Brittonia 20:164. *V47552*; Isotype; open sagebrush slope, N. of Birch Creek, 3 mi. N.W. of Blue Dome, Clark County, alt. 5,600 ft.; July 7, 1965; coll. C.L. Hitchcock.

## DICOTYLEDONAE

### Compositae

*Arnica andersonii* Piper 1920, Proc. Biol. Soc. Wash. 33:106. *V42843*; Isotype; Ellison, Skeena, B.C., damp woods; Sept. 11, 1910; coll. J.R. Anderson.

*Aster carterianus* Henry 1917, Ottawa Naturalist 31:57. *V42988*; Type; Cameron Lake, near Alberni, Vancouver Island, B.C.; Aug., 1916. *V42989*; Type; Cameron Lake, near Alberni, Vancouver Island, B.C.; Aug., 1916; coll. W.R. Carter.

*Erigeron salishii* Douglas & Packer 1988, Can. J. Bot. 66(3):414. *V108026*; Holotype; Star Peak, Chelan Co., Washington State, ca. 16.5 mi. SW of Twisp, elev. 7400 ft., in dry alpine sedge meadow, slope 23%, aspect S; July 27, 1972; coll. G.W. Douglas and G.G. Douglas.

*Grindelia andersonii* Piper 1918, Proc. Biol. Soc. Wash. 31:77. *V43254*; Isotype; Saanich Arm, Saanich District, Victoria, Vancouver Island, B.C.; tide sands, sandy shore near sea; coll. J.R. Anderson.

Cruciferae

*Draba acinacis* St. John 1928, Rep. Prov. Museum Nat. Hist. B.C. 1927:E14. *V8028*; Type; Black Tusk Slope, Garibaldi, B.C., elev. 5,300 ft.; July 31, 1926; coll. G.A. Hardy.

*Draba kluanei* Mulligan 1979, Can. J. Bot. 57(17):1873. *V139386*; Isotype; Hoge Cr., ca. 31 km. SSW of Burwash Landing, on rocky alpine slope, 61° 17′ N 139° 35′ W, elev. 1980 m; July 8, 1976; coll. G.W. Douglas, G.G. Douglas and L. Freese.

*Draba ruaxes* Payson & St. John 1930, Proc. Biol. Soc. Wash. 43:117. *V8597(a)*; Paratype; Mt. Chris Spencer, elev. 9,000 ft.: *V8597(b)*; Paratype; Fury Gap, Mt. Waddington Expedition, elev. 8,500 ft.; July 7, 1928; coll. Mrs. Don Munday.

*Draba scotteri* Mulligan sensu G.A. Mulligan, Can. J. Bot. 57(17):1874. *V137438(a)*; Paratype; Hoodoo Mt., ca 35 km SSE of Kluane Lake, Kluane National Park, Yukon, 60° 43′ N, 138° 14′ W, elev. 1540 m, on alpine rocky scree slope, soil xeric, aspect W, slope 40%; July 27, 1978; coll. G.W. Douglas and M.J. Ratcliffe.

Gentianaceae

*Gentianella detonsa* Rottb. ssp. *yukonensis* Gillett 1957, Ann. Mo. Bot. Gard. 44:216. *V18835*; Paratype; Snag airport, Yukon, abundant in grassy woods; July 1945; coll. G.A. Noel.

*Gentianella tenella* (Rottb.) Börner ssp. *pribilofii* Gillett 1957, Ann. Mo. Bot. Gard. 44:226. *V13595*; Paratype; St. Paul Island, Bering Sea; Aug. 15, 1914; coll. J.M. Macoun.

Juncaceae

*Juncus fucensis* St. John 1928, Contr. Bot. Dept. State College Wash. 10. *V845*; Paratype; Comox, Vancouver Island, B.C., salt marsh; June 20, 1915; coll. John Macoun.

Labiatae

*Prunella vulgaris* L. var. *lanceolata f. erubescens* Henry 1915, Flora of Southern B.C.: 258, W.J. Gage & Co. Ltd., Toronto. *V4239*; Type; Cameron Lake, Vancouver Island, B.C.; Aug., 1915; coll. W.R. Carter.(Note on herbarium sheet by B. Boivin, 1969. "probably the type collection of *f. erubescens*. Possibly isotype, more likely the holotype. Henry herbarium did not survive.")

Leguminosae

*Lupinus lepidus* Dougl. ssp. *medius* Detling 1951, Am. Midl. Nat. 45:488. *V22426*; Isotype; 3 mi. S. of Lapine, Deschutes County, Oregon, elev. 4,500 ft; Aug. 7, 1949; coll. L.E. Detling.

Loasaceae

*Mentzelia multicaulis* (Osterh.) Goodman var. *librina* Thorne and F.J.Smith 1986, Great Basin Nat. 46(3):555. *V140174*; Isotype; Book Cliffs, Horse Canyon, Emery Co., Utah, ca 13 km on highway 124 from East Carbon, ca 0.4 km on road to cliff base, elev. 1890 m, *Atriplex*, *Stanleya*, and *Erigeron* community, SW aspect; Aug. 18, 1985; coll. F.J. Smith

Rosaceae

*Potentilla nivea* L. ssp. *fallax* A.E. Porsild 1951, Bull. Nat. Mus. Can. 121:226. *V54924*; Isotype; Mile 132 Canol Rd., Lower Lapie River Crossing, Yukon Territory, elev. 4,000-5,000 ft.; June 14, 1944; coll. A.E. Porsild and A.J. Breitung.

*Potentilla protea* Sojak 1985, Preslia, 57:265. *V132591*; Paratype; Summit Lake, mile 392 Alaska Hwy., 58° 37′ N, 124° 42′ W, hill with microwave tower, alpine tundra, elev. 1620 m; July 18, 1982; coll. A. Ceska, O. Ceska and T. Goward.

Salicaceae

*Salix raupii* Argus 1974, Can. J. Bot. 52(6):1303. *V66676*; Isotype; McDonald Creek, Mile 409 Alaska Highway, 58° 48′ N, 125° 00′ W; *Picea glauca, Populus tremuloides* woods on gravel flood plain; coll. G.W. Argus and W. Chunys. *V66669*; Paratype; McDonald Creek, Mile 409, Alaska Hwy., 58° 48′ N, 125° 00′ W; *Picea glauca, Populus tremuloides* woods on gravel flood plain; coll. E.W. Argus and W. Chunys

*Salix sessilifolia* Nutt. var. *vancouverensis* Brayshaw 1973, Syesis 6:147. *V57793 A & B*; male type (2 sheets); gravel bar in Cowichan River, by C.P. Railway bridge, Duncan, Vancouver Island, 48° 46′ N, 123° 43′ W; Aug. 11, 1972; *V57894*; female type; gravel bar in Cowichan River, by C.P. Railway bridge, Duncan, Vancouver Island, 48° 46′ N, 123° 43′ *V*, elev. 0 m; Aug. 11, 1972; *V57862*; Isotype (female); gravel bar in Cowichan River, Duncan, Vancouver Island, 48° 46′ N, 123° 43′ W, elev. 0 m; Aug. 11, 1972; T.C. Brayshaw coll. all types.

Saxifragaceae

*Saxifraga tischii* Skelly 1988, Madrono 35(2):126. *V798911*; Paratype; Castlecrag Mt., Strathcona Park, Vancouver Is., British Columbia, 49° 40′ N, 125° 23′ W, upper cliffs, elev. 1500 m; Aug. 9, 1979; coll. R.T. Ogilvie and C. Beguin.

Violaceae

*Viola biflora* L. ssp. *carlottae* Calder and Taylor 1965, Can. J. Bot. 43:1395. *V53899*; Isotype; Lake Takakia, Cumshewa Inlet, Moresby Is., Queen Charlotte Islands, about 10 miles S of Moresby logging camp, 1870 ft, widely distributed of cliffs and rock outcrops; July 25-30, 1964; coll. J.A. Calder and R.L. Taylor;

# INVERTEBRATES

## PORIFERA
### POECILOSCLERIDA

*Mycale bamfieldense* Reiswig & Kaiser 1989, Can. J. Zool. 67(3):675. *RBCM 988-762-1*; Holotype (duplicate spicule preparation); Edward King Island, Barkley Sound, British Columbia, intertidal; June 30, 1984; coll. H.M. Reiswig

## CNIDARIA
### HYDROZOA
### Calyptoblastea

Bonneviellidae

*Bonneviella gracilis* Fraser 1939, Can. J. Res. 17:59. *BCPM 976-454-1*; Type; Dease Strait (Canadian Arctic), 40 fms; July 25, 1937 (specimen dried out); coll. H.A. Larsen on m/v St. Roche.

Campanularidae

?*Campanularia castella* Fraser 1925, Univ. Calif. Berkeley Publ. Zool. 28:170. *BCPM 976-342-1*; Cotype; San Francisco Bay, California, U.S.A., 10-17 fms. (specimen dried out).

?*Campanularia fasciculata* Fraser 1941, Proc. U.S. Nat. Mus. 91:81. *BCPM 976-346-1*; Cotype; off Chatham, Cape Cod, 33 fms. (specimen dried out).

*Clytia hesperia* Torrey 1904, The Hydroids of the San Diego Region, Univ. Calif. Pub. Zool. 2:12. *BCPM 976-375-1*; Type; La Jolla, California, "between tides".

*Clytia laxa* Fraser 1937, Smithson. Misc. Collect. 91(28):1. *BCPM 976-380-1*; Cotype; Johnson Hyd. Stn. 51; East of Haiti, 15 fms; Feb. 16, 1933. (specimen dried out).

*Gonothyraea integra* Fraser 1940, Proc. U.S. Nat. Mus. 88:576. *BCPM 976-403-1*; Cotype; Block Is., near North Light, (E. of Long Island, N.Y.), 13 fms; Aug. 24, 1880. (specimen dried out).

Campanulinidae

*Egmundella fasciculata* Fraser 1940, Proc. U.S. Nat. Mus. 88:577. *BCPM 976-289-1*; Cotype; off Martha's Vineyard, 40° 03′N, 70° 31′W, 100 fms; Aug. 23, 1881.

Halecidae

*Endothecium reduplicatum* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:107. *BCPM 976-457-1*; Type; Sagami Bay, Japan.

*Halecium flabellatum* Fraser 1935, Trans. R. Soc. Can. Ser. 3, Sect. 5, 29:108. *BCPM 976-476-1*; Female Type; Shio-no-misaki, kii, Wakayama Prefecture, Japan, 18 fms; May 23, 1933. (specimen dried out): *BCPM 976-477-1*; Male Type: Shio-no-misaki, kii, Wakayama Prefecture, Japan, 18 fms; May 23, 1933. (microscope slide).

*Halecium minor* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:108. *BCPM 976-485-1*; Type; Hayama, Sagami Bay, Japan, on an anthozoan; Aug. 25, 1933. (specimen dried out).

*Halecium nullinodum* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:109. *BCPM 976-489-1*; Type; Oki-nose, outside of Sagami Bay, Japan, 50-60 fms; Sept. 22, 1933. (specimen dried out).

*Halecium vasiforme* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:109. *BCPM 976-503-1*; Type; Hayama, Sagami Bay, Japan; Aug. 25, 1933. (specimen dried out).

Lafoeidae

*Lafoe adnata* Fraser 1925, Univ. Calif. Berkeley Publ. Zool. 28:170. *BCPM 976-324-1*; Cotype; Faralone Islands, Calif., U.S.A. 33-35 fms. (specimen dried out).

Plumularidae

*Aglaophenia curvidens* Fraser 1937, Smithson. Misc. Collect. 91(28):3. *BCPM 976-770-1*; Cotype; North of Puerto Rico, 26 fms; Feb. 25, 1933.

*Aglaophenia inconstans* Fraser 1941, Proc. U.S. Nat. Mus. 91:86. *BCPM 976-784-1*; Cotype; Bering Sea, U.S.F.C. Sta. 3497. (specimen dried out).

*Aglaophenia meganema* Fraser 1937, Smithson. Misc. Collect. 91(28):4. *BCPM 976-790-1*; Cotype; North of Puerto Rico, 9 fms; Feb. 24, 1933. (specimen dried out).

*Antennella avalonia* Torrey 1902, The Hydroida of the Pac. Coast of North America, Univ. Calif. Pub. Zool. 1:74. *BCPM 976-873-1*; Type; Avalon (Catalina Island), July 1, 1896. (labelled as *Monostaechus avalonia*)

*Antennella curvitheca* Fraser 1937, Smithson. Misc. Collect. 91(28):4. *BCPM 976-816-1*; Cotype; North of Puerto Rico, 9 fms; Feb. 24, 1933.

*Antennella paucinoda* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:110. *BCPM 976-818-1*; Type; Arasaki, Sagami Bay, Japan; Aug. 4, 1931.

*Halicornaria sinuosa* Fraser 1925, Univ. Calif. Berkeley Publ. Zool. 28:171. *BCPM 976-861-1*; Cotype; Gulf Stream, off Cape Florida, 2-1/8 mi. S.S.E. of Fowey Rock Light, 45 fms.

*Hippurella elegans* Fraser 1937, Smithson. Misc. Collect. 91(28):5. *BCPM 976-865-1*; Cotype; North of Puerto Rico, 240 fms, Feb. 1, 1933.

*Plumularia alicia* Torrey 1902, The Hydroida of the Pac. Coast of North America, Univ. Calif. Pub. Zool. 1:75. *BCPM 976-879-1*; Type; Vicinity of San Pedro, June 12, 1901.

*Tetranema furcata* Fraser 1937, Hydroids of the Pacific Coast of Canada and the United States. Univ. Toronto Press, Toronto. 207 pp. 193. *BCPM 976-948-1*; Type; Kaison Bank (W. coast of Moresby Island, Queen Charlotte Islands), 110 fms; July 28, 1936.

Sertularidae

*Selaginopsis trilateralis* Fraser 1936, J. Biol. Board Can. 1:504. *BCPM 976-574-1*; Type; Houston Stewart Channel, Queen Charlotte Islands, 15-18 fms; July 22, 1935. (specimen dried out).

*Sertularella ornata* Fraser 1937, Smithson. Misc. Collect. 91(28):2. *BCPM 976-612-1*; Cotype; Johnson Hyd. Stn. 37. North of Puerto Rico, 180 fms; Feb. 10, 1933. (specimen dried out).

*Sertularia brevis* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:110. *BCPM 976-643-1*; Type; Hayama, Sagami Bay, Japan, on Sargassum; Aug. 24, 1933. (specimen dried out).

Synthecidae

*Synthecium gracile* Fraser 1937, Smithson. Misc. Collect. 91(28):2. *BCPM 976-962-1*; Cotype; North of Puerto Rico, 40 fms; Feb. 7, 1933. (specimen dried out).

Gymnoblastea

Bougainvilliidae

*Amphinema platyhedos* Arai and Brinckmann-Voss 1983, Can. J. Zool. 61(9):2179. *BCPM 983-1403-1*; Paratype; Strait of Georgia, B.C., 49° 24'N, 123° 56.6'W, 375-0 m.; May 25, 1981.

Codonidae

*Sarsia viridis* Brinckmann-Voss 1980, Life Sci. Occ. Pap. R. Ont. Mus. No. 34:1-4. *BCPM 980-319-1*; Paratype; Sooke, B.C., 48° N, 123° W, surface; May 9, 1979; coll. A. Brinckmann-Voss.

Corynidae

*?Coryne corrugata* Fraser 1925, Univ. Calif. Berkeley Publ. Zool. 28:167. *BCPM 976-128-1*; Cotype; San Diego, California, U.S.A., near jetty; May 3, 1902. (specimen dried out).

Eudendridae

*Eudendrium biseriale* Fraser 1935, Trans. R. Soc. Can., Ser. 3, Sect. 5, 29:105. *BCPM 976-228-1*; Type; Ebosi-iwa, Sagami Bay, Japan, low tide. (specimen dried out).

*Eudendrium rugosum* Fraser 1940, Proc. U.S. Nat. Mus. 88:575. *BCPM 976-250-1*; Cotype; S.E. of Newfoundland, 46° 53' N, 44° 39'30" W, 76 fms; Aug. 11, 1886.

Tubularidae

*Tubularia aurea* Fraser 1936, J. Biol. Board Can. 1:504. *BCPM 976-145-1*; Type; Danger Rocks, Houston Stewart Channel, Queen Charlotte Islands, shore; June 17, 1935. (specimen dried out).

ANTHOZOA
**Actiniaria**

Actiniidae

*Epiactis fernaldi* Dunn and Chia 1986, Can. J. Zool. 64(8):1665. *BCPM 983-1579-1*; Paratype; W. side of Cattle Pt., San Juan Island, Washington, U.S.A., 48° N, 122° W, intertidal, surge channel; Aug. 15, 1979; coll. D.F. Dunn and L. Francis.

*Epiactis lisbethae* Dunn & Chia 1986, Can. J. Zool. 64(8):1665. *BCPM 983-1578-1*; Paratype; False Bay, San Juan Island, Washington, U.S.A., 48° N, 123° W, intertidal; coll. D.F. Dunn and F.S. Chia.

Hormathiidae

*Paraphelliactis pabista* Dunn 1982, Syesis 15:51. *BCPM 982-1-1*; Paratypes; Queen Charlotte Sound, B.C., 50° 54.4' N, 130° 06' W, 1,200 fms., mud; Sept. 11, 1964; coll. D.B. Quayle, F.R. Bernard and T.C. Lambert.

Metridiidae

*Metridium giganteum* Fautin, Bucklin & Hand 1989, Wasman J. Biol. 47(1-2):81. *BCPM 986-79-11*; 3 Paratypes; Hecate Strait, B.C., 54° 12' N, 131° 03.4' W, 99 m; Feb. 6, 1986; coll. D. Moore

ANNELIDA
BRANCHIOBDELLIDA

*Xironogiton victoriensis* Gelder & Hall 1990, Can. J. Zool. 68(11):2353. *RBCM 990-817-1*; Paratype; Goldstream River, Vancouver Island, B. C.; Aug. 10, 1987; Coll. S.R. Gelder: *RBCM 990-817-2*; Paratype; Goldstream River, Vancouver Island, B.C.; Aug. 10, 1987; coll. S.R. Gelder & R.O. Brinkhurst.

POLYCHAETA
**Orbiniida**

Orbiniidae

*Orbiniella nuda* Hobson 1974 Can. J. Zool. 52(1):69. *BCPM 973-39-1*; 9 Paratypes; Kiket Island, Washington, U.S.A., 1.8 m. above mean lower low water, shell, gravel, silt; Aug. 7, 1970; coll. J. Houghton.

*Protoariciella oligobranchia* Hobson 1976, Can. J. Zool. 54(4):591. *BCPM 974-83-20*; 2 Paratypes; Maynard Cove, Victoria, B.C., intertidal, shell/gravel; April 23, 1974: *BCPM 974-84-3*; 2 Paratypes; Maynard Cove, Victoria, B.C., intertidal, shell/gravel; April 26, 1974:

*BCPM 974-123-27*; 4 Paratypes; Maynard Cove, Victoria, B.C., intertidal, gravel; May 21, 1974: *BCPM 974-180-21*; 1 Paratype; Maynard Cove, Victoria, B.C., intertidal, shell/gravel, June 5, 1974: *BCPM 974-191-17*; 2 Paratypes; Maynard Cove, Victoria, B.C., intertidal, shell/gravel; July 2, 1974. K.D. Hobson coll. all types.

Paraonidae

*Paraonis spinifera* Hobson 1972, Proc. Biol. Soc. Wash. 85(48):553. *BCPM 218*; 3 Paratypes; Harney Pass, San Juan Islands, Washington, U.S.A., 27 m., mud; July 1967; coll. H.L. Sanders.

**Spionida**

Acrocirridae

*Acrocirrus columbianus* Banse 1979, Proc. Biol. Soc. Wash. 91(4):924. *BCPM 977-233-1*; Holotype; Brotchie Ledge, Ogden Point, Victoria, B.C., 48° 24.4′ N, 123° 23.3′ W, 15-25 ft., rock reef, from base of *Balanus nubilus* clump (in burrows of unknown origin); Feb. 8, 1973; coll. P. Lambert and B. Cooke: *BCPM 977-234-1*; 5 Paratypes; Brotchie Ledge, Ogden Point, Victoria, B.C., 48° 24.4′ N, 123° 23.3′ W, 15-25 ft., rock reef, from base of *Balanus nubilus* clump (in burrows of unknown origin); Feb. 8, 1973; coll. P. Lambert and B. Cooke.

*Acrocirrus occipitalis* Banse 1979, Proc. Biol. Soc. Wash. 91(4):926. *BCPM 978-182-1*; Holotype; reef opposite Prospector Pt., Brundige Inlet, B.C., < 29 m.; June 22, 1974; coll. P. Lambert and P. Kerfoot.

Magelonidae

*Magelona dakini* Jones 1978, Proc. Biol. Soc. Wash. 91(1):355. *BCPM 978-260-1*; 2 Paratypes; Port Phillip Bay, Victoria, Australia, < 10 m., sand and silty clay; Feb. 12, 1970; coll. Poore et al.

*Magelona hartmanae* Jones 1978, Proc. Biol. Soc. Wash. 91(1):350. *BCPM 978-259-1*; 2 Paratypes; *Velero IV*, Stn. 4842-57, off Port Hueneme, Oxnard, California, U.S.A., 34° 11′ 10″ N, 119° 15′ 50″ W, 12.7 m.; Feb. 7, 1957; coll. m/v *Velero IV*.

*Magelona hobsonae* Jones 1978, Proc. Biol. Soc. Wash. 91(1):344. *BCPM 978-261-1*; 1 Paratype; West Point Beach, Puget Sound, Wash., U.S.A., 47° 39′45″ N, 122°26′04″ W, intertidal; Sept., 1974; coll. J.W. Armstrong.

Spionidae

*Boccardia pugettensis* Blake 1979, Proc. Biol Soc. Wash. 92(3):612. *BCPM 42-2*; Paratype; Nanoose Bay, Vancouver Island, B.C., 30 m; May 6, 1965; coll. D.V. Ellis

**Terebellida**

Ampharetidae

*Sasanopsis hesslei* Banse 1979, Can. J. Zool. 57(8):1550. *BCPM 978-173-1*; Holotype; Chatham Sound, off Ridley Island, B.C., 44 m.; July 10, 1974; coll. Environmental Protection Service, Environment Canada.

Terebellidae

*Betapista dekkerae* Banse 1980, Can. J. Fish. Aquat. Sci. 37(1):22. *BCPM 978-174-1*; Holotype; Blubber Bay, B.C., 48° 48.2′ N, 124° 37.1′ W, 25-35 m.; Dec. 8, 1965; coll. D. Ellis.

**ARTHROPODA**
**CRUSTACEA**
**COPEPODA**

Kroyeriidae

*Kroeyerina benzorum* Deets 1987, Can. J. Zool. 65(9):2134. *BCPM 986-270-1*; Holotype; Sea of Cortez (Punta Arena de la Ventana), found in nasal lamellae of *Alopias vulpinus* and *Isurus oxyrhinchus*; July 1983; coll. G. Deets: *BCPM 986-270-2*; 2 Paratypes; Sea of Cortez (Punta Arena de la Ventana), found in nasal lamellae of *Alopias vulpinus* and *Isurus oxyrhinchus*; July 1983; coll. G. Deets.

*Kroeyerina cortezensis* Deets 1987, Can. J. Zool. 65(9):2132. *BCPM 986-271-1*; Holotype; Sea of Cortez (Punta Arena de la Ventana), found in nasal lamellae of *Carcharhinus falciformis*; July 1983; coll. G. Deets: *BCPM 986-271-2*; female paratype; Sea of Cortez (Punta Arena de la

Ventana), found in nasal lamellae of *Carcharhinus falciformis*; July 1983; coll. G. Deets.

*Kroeyerina deborahae* Deets 1987, Can. J. Zool. 65(9):2130. *BCPM 986-272-1*; Holotype; Palos Verdes, California, found in nasal lamellae of *Rhinobatus productus*; April 1982; coll. G. Deets: *BCPM 986-272-2*; 2 female paratypes; Palos Verdes, California, found in nasal lamellae of *Rhinobatus productus*; April 1982; coll. G. Deets.

*Kroeyerina mobulae* Deets 1987, Can. J. Zool. 65(9):2130. *BCPM 986-273-1*; Female Holotype; Sea of Cortez (Punta Arena de la Ventana), found in nasal lamellae of *Mobula japanica*; July 1986; coll. G. Deets. *BCPM 986-273-2*; female paratype; Sea of Cortez (Punta Arena de la Ventana), found in nasal lamellae of *Mobula japanica*; July 1986; coll. G. Deets.

*Lernanthropinus nematistii* Deets & Benz 1988, Can.J. Zool. 66(4):866. *BCPM 986-274-1*; Female Holotype; Sea of Cortez (Punta Arena de la Ventana), found upon branchial lamellae of *Nematistius pectoralis*; July 15, 1986; coll. G. Deets. *BCPM 986-274-2*; Allotype; Sea of Cortez (Punta Arena de la Ventana), found upon branchial lamellae of *Nematistius pectoralis*; July 15, 1986; coll. G. Deets.

## CIRRIPEDIA

### Scalpellidae

*Scalpellum wyethi* Cornwall 1951, The Can. Field-Nat. 65(1):36. *BCPM 271*; 4 Types; 1,000 mi. E. ofGuam, 1,600 fms; March 1950; coll. H.E. Wyeth.

## MALACOSTRACA

### Decapoda

### Hippolytidae

*Heptacarpus pugettensis* Jensen 1983, J. Crust. Biol. 3(2):314. *BCPM 982-173-1*; 4 Female Paratypes; Alki Point, Seattle, Wash., U.S.A., low intertidal, under rocks; May 25, 1982; coll. G. Jensen. *BCPM 982-174-1*; male paratype; Alki Point, Seattle, Washington, U.S.A., low intertidal, under rocks; June 20, 1982; coll. G. Jensen.

*Lebbeus catalepsis* Jensen 1987, Bull. Southern California Acad. Sci. 86(2):89. *BCPM 985-530-1*; 5 Paratypes; between Sekiu and Neah Bay, Wash., U.S.A., 48° 19′ N, 124° 28′ W, intertidal, among rocks and algae; July 28, 1984; coll. D. Doty and G. Jensen: *BCPM 985-531-1*; 2 female Paratypes; Strait of Juan de Fuca, between Sekiu and Neah Bay, Wash., U.S.A., 48° 19′ N, 124° 28′ W, intertidal, among rocks; Dec. 23, 1984; coll. G.C. Jensen.

### Paguridae

*Pagurus caurinus* Hart 1971, J. Fish. Res. Board Can. 28(10):1528. *BCPM 979-11374-1*; Male Holotype; Frank Island, Cox Bay, Tofino, B.C., 49° 08′ N, 125° 55′ W, intertidal, rocks and weeds; July 1, 1965; coll. J.F.L. Hart.

*Pagurus quaylei* Hart 1971, J. Fish. Res. Board Can. 28(10):1532. *BCPM 979-11373-1*; Male Holotype; off Frederick Island, B.C., 53°56′ N, 123° 08.5′ W, 111 m., sand and boulders; June 19, 1962; coll. D.B. Quayle.

*Pagurus stevensae* Hart 1971, J. Fish. Res. Board Can. 28(10):1537. *BCPM 979-11375-1*; Male Holotype; off Malcolm Island, B.C.,50° 37′ N, 127° 03.8′ W, 60 m., shell/gravel; Jan. 12, 1963; coll. D.B. Quayle.

### Cambarinae

*Orconectes rafinesquei* Rhoades 1944, Am. Midl. Nat. 31:116. *BCPM 979-11372-1*; 4 Paratypes; Rough River (at falls), Grayson-Breckenridge County, Kentucky, U.S.A.; Sept. 3, 1941; coll. R. Rhoades.

## PERACARIDA

### Cumacea

*Campylaspis rufa* Hart 1930, Contrib. Can. Biol. Fish. 6(3):38. *BCPM 978-123-1*; Type (parts on 3 micro. slides); Mitlenatch Island, Georgia Strait, B.C., 49° N 125° W; 200 m.; Jan. 16, 1929; coll. J.F.L. Hart.

*Cumella vulgaris* Hart 1930, Contrib. Can. Biol. Fish. 6(3):37. *BCPM 978-122-1*; 1 Male Type (parts on 2 micro. slides); Parry Bay, between William Head and Albert Head, Vancouver Island, B.C., 48° N, 123° W; Aug. 17, 1929: *BCPM 978-121-1*; Female Type (parts on 2 micro. slides); Brockton Pt., Burrard Inlet, B.C., 49° N, 123° W; Mar. 20, 1930; coll. J.F.L. Hart.

*Diastylis pellucida* Hart 1930, Contrib. Can. Biol. Fish. 6(3):32. *BCPM 978-118-1*; Female Type (parts on 2 micro. slides); Deep Cove, Indian Arm, Burrard Inlet, B.C., 49° N, 122° W, 120 m.; June 27, 1929; coll. J.F.L. Hart.

*Eudorella pacifica* Hart 1930, Contrib. Can. Biol. Fish. 6(3):28. *BCPM 978-114-1*; Male Type (3 micro. slides); Deep Cove, Indian Arm, Burrard Inlet, B.C., 49°N, 122°W, 120 m.; June 27, 1929: BCPM 978-115-1; Female Type (parts on 3 micro. slides); Deep Cove, Indian Arm, Burrard Inlet, B.C., 49° N, 122° W, 120 m.; June 27, 1929; coll. J.F.L. Hart.

*Eudorella tridentata* Hart 1930, Contrib. Can. Biol. Fish. 6(3):28. *BCPM 978-116-1*; Female Type (parts on 3 micro. slides); Brandon Island, Departure Bay, B.C., 49° N, 123° W, 20-30 m.; May 27, 1929: *BCPM 978-117-1*; Male Type (parts on 3 micro. slides, Juvenile); Brandon Island, Departure Bay, B.C., 49° N, 123° W, 20-30 m.; July 11, 1929; coll. J.F.L. Hart.

*Hemilamprops gracilis* Hart 1930, Contrib. Can. Biol. Fish. 6(3):26. *BCPM 978-112-1*; Female Type (parts on 3 micro. slides); Mitlenatch Island, Georgia Strait, B.C., 49° N, 125° W, 200 m.; Jan. 16, 1929; coll. J.F.L. Hart.

*Lamprops carinata* Hart 1930, Contrib. Can. Biol. Fish. 6(3):34. *BCPM 978-119-1*; Female Type (parts on 3 micro. slides); Berry Pt., Burrard Inlet, B.C., 49° N, 122° W, 25-50 m.; June 6, 1929: *BCPM 978-119-2*; Male Type (parts on 3 micro. slides); Berry Pt., Burrard Inlet, B.C., 49° N, 122° W, 25-50 m.; June 6, 1929; coll. J.F.L. Hart.

*Lamprops serrata* Hart 1930, Contrib. Can. Biol. Fish. 6(3):36. *BCPM 978-120-1*; Type (parts on 3 micro. slides); Brandon Island, Departure Bay, B.C., 49°N, 123°W, 20-30 m; May 27, 1929; coll. J.F.L. Hart.

**Amphipoda**

*Hyalella texana* Stevenson and Peden 1973, Am. Midl. Nat. 89(2):427. *BCPM 979-11376-1*; 17 Paratypes; Clear Creek Spring, Menard County, Texas, U.S.A.; Sept. 5, 1971; coll. M.M. Stevenson.

INSECTA
**Coleoptera**

Cerambycidae

*Callidium hardyi* van Dyke 1928, Pan-Pac. Entomol. 4:112. *ENT990-521* & *ENT990-522*; 2 Paratypes; taken from Douglas Fir (*Pseudotsuga taxifolia* Britt.) at Gordon Head, Victoria, B.C.; May 30, 1927; coll. G.A. Hardy: *ENT990-523*; Paratype; locality data not decipherable looks like "Sah I Ferie"; April 12, 1897. (van Dyke in his original description lists all paratypes from "Garden Head" [Gordon Head], one being collected on April 12, 1897, although the above specimens are all labelled as Paratypes of *C. hardyi* there is some question as to their status as ENT990-523 appears to be a different species than the other two.)

*Callidium vancouverense* van Dyke 1927, Pan-Pac. Entomol. 3:104. *ENT990-519*; Paratype; on brush pile of Douglas fir boughs (*Pseudotsuga taxifolia* Britt.) Sidney, B.C.; April 26, 1926; coll. W.H.A. Preece: *ENT990-520*; Paratype; on brush pile of Douglas fir boughs, Sidney, B.C.; April 27, 1926; coll. W.H.A. Preece.

*Eumichthus oedipus* Lec. var. *ater* Hardy and Preece 1927, Pan. Pac. Entomol. 3:188. *ENT990-512*; Paratype; Sidney, Vancouver Island, B.C.; June 22, 1926; coll. W.H.A. Preece: *ENT990-513*; Paratype; Sidney, B.C.; June 5, 1926; coll. W.H.A. Preece.

*Phymatodes decussatus* Lec. var. *latifasciatus* Hardy and Preece 1927, Pan. Pac. Entomol. 3:191. *ENT990-507*; Type; Mt. Tolmie, Saanich, B.C.; May 12, 1926; coll. G.A. Hardy: *ENT990-508* to *ENT990-510*; 3 Paratypes; Mt. Tolmie, Saanich, B.C.; May 12, 1926; coll. G.A. Hardy: *ENT990-511*; Paratype; Mt. Tolmie, Saanich, B.C., on *Quercus garryana*; June 3, 1926; coll. G.A. Hardy.

*Phymatodes vulneratus* Lec. var. *nigrescens* Hardy and Preece 1927, Pan. Pac. Entomol. 3:190. *ENT990-504*; Paratype; Sidney, Vancouver Island, B.C.; May 10, 1926; coll. W.H.A. Preece: *ENT990-505*; Paratype; Sidney Vancouver Island, B.C.; May 10, 1926; coll. W.H.A. Preece: *ENT990-506*; Paratype; Sidney, Vancouver Island, B.C.; April 26, 1926; coll. W.H.A. Preece.

*Semanotus ligneus* (Fabricius) ssp. *thujae* van Dyke 1927, Pan-Pac. Entomol. 3:103. *ENT990-514* & *ENT990-515*; 2 Paratypes; Tod Inlet, Vancouver Island; Dec. 5, 1925. *ENT990-516* & *ENT990-518*; 2 Paratypes; Tod Inlet, Vancouver Island, B.C.; Nov. 8, 1925: *ENT990-517*; 1 Paratype; Tod Inlet, Vancouver Island; pupa collected Aug. 30, 1925, emerged Nov. 1, 1925; G.A. Hardy coll. all types.

Curculionidae

*Dorytomus columbianus* Sleeper 1955, Pan. Pac. Entomol. 31:157. *ENT990-524* to *ENT990-529*; 6 Paratypes; Creston, B.C., on tree (*Populus trichocarpa*); April 13, 1952; coll. G.S. Smith.

Melyridae

*Hoppingiana monticola* Blaisdell 1934, Can. Ent. 66(7):151. *ENT988-4237*; Paratype; Copper Mountain, B.C., elev. 4300 ft; June 20, 1930; coll. G.S. Smith.

Pselphidae

*Adranes taylori* Wick. 1901, Can. Entomol. 33(1):27. *ENT988-5893*; Cotype; Nanaimo, B.C.; April 2, 1898; coll. G.W. Taylor.

Scarabaeidae

*Onthophagus oklahomensis* Brown 1927, Can. Entomol. 59(6):128. *ENT990-503*; Female Paratype; Payne County, Oklahoma; June 13, 1925; coll. W.J. Brown: *ENT990-402*; Male Paratype; Payne County, Oklahoma; May 18, 1925; coll. W.J. Brown.

*Strigodermella knausi* Brown 1925, Bull. Brooklyn Ent. Soc. 20:200. *ENT991-133462*; Paratype; sand hills, Medora, Kansas, U.S.A.; June 1925; coll. R.H. Beamer.

Staphylinidae

*Philonthus aurulentus* ab. *ruber* Hatch 1957, The Beetles of the Pacific N.W., Univ. Wash Press., Pt.2:181. *ENT991-133460* Female Paratype; Vernon, B.C.; May 5, 1908; coll. unknown.

*Philonthus lopezi* Hatch 1957, The Beetles of the Pac. N.W., Univ. Wash. Publ. Biol. 16 Pt.2:199. *ENT991-133459*; Male Paratype; Nicola Lake, B.C.; Aug. 13, 1920; coll. N.L. Cutler: *ENT991-133464*; Male Paratype; Vancouver B.C.; Nov. 1, 1937; coll. Livingston.

*Philonthus oceanus* Hatch 1957, The Beetles of the Pac. N.W., Univ. Wash. Publ. Biol. 16, Pt.2:204. *ENT991-133463*; Male Paratype; Vancouver, B.C.; coll. Livingston.

*Quedius pugetensis* Hatch 1957, The Beetles of the Pac. N.W., Univ. Wash. Publ. Biol. 16, Pt.2:218. *ENT991-133461*; Paratype; Vancouver, B.C.; coll. unknown.

*Stenus columbianus* Sanderson 1957, in: Hatch 1957, The Beetles of the Pac. N.W. Univ. Wash. Publ. Biol. 16, Pt.2:260. *ENT990-538*; Holotype; Vancouver, B.C.; Aug.24, 1896; coll. Livingston: *ENT990-539*; Allotype; Vancouver, B.C.; Aug. 24, 1896; coll. Livingston. (note made Feb. 2, 1971 — "male, not female, should have been designated a paratype." M.W.)

**Diptera**

Asilidae

*Efferia frewingi* Wilcox 1966, Proc. Calif. Acad. Sci. 34(2):169. *ENT991-13909* & *ENT991-13910*; 2 Male Paratypes; Antelope Mt., Grant Co., Oregon, elev. 6500 ft.; Aug. 13, 1932; coll. D.K. Frewing: *ENT991-13911*; female Paratype; Antelope Mt., Grant Co., Oregon, elev. 6500 ft.; Aug. 13, 1932; coll. D.K. Frewing.

Bibionidae

*Bibio melanopilosus* Hardy 1936, Utah Acad. Sci., Arts and Letters, Proc. 13:195. *ENT990-584*; Male Paratype; Spanish Fork, Utah; coll. D.E. Hardy.

*Bibio nigrifemoratus* Hardy 1937, Utah Acad. Sci., Arts and Letters, Proc. 14:199. *ENT990-586*; Paratype; Monte Lake, B.C.; June 13, 1936 (specimen missing); coll. J.K. Jacob.

Calliphoridae

*Protocalliphora halli* Sabrosky, Bennett & Whitworth 1989, Bird Blow Flies (Protocalliphora) of North America (Diptera:Calliphoridae):160. *ENT990-166* to *ENT990-176*; 11 Paratypes; *ENT990-192* to

*ENT990-200*; 9 Paratypes; *ENT990-208* to *ENT990-223*; 16 Paratypes; *ENT990-233* to *ENT990-244*; 12 Paratypes; *ENT990-253* to *ENT990-256*; 4 Paratypes; *ENT990-258* to *ENT990-261*; 4 Paratypes; *ENT990-263* to *ENT990-284*; 22 Paratypes; *ENT990-295* to *ENT990-321*; 27 Paratypes; *ENT990-331* to *ENT990-337*; 7 Paratypes; *ENT990-339* to *ENT990-353*; 15 Paratypes; *ENT990-362* to *ENT990-366*; 5 Paratypes; *ENT990-372* to *ENT990-376*; 5 Paratypes; *ENT990-378* to *ENT990-379*; 2 Paratypes; *ENT990-380* to *ENT990-382*; 3 Paratypes; *ENT990-410* to *ENT990-411*; 2 Paratypes; all types from Little Qualicum River estuary, Qualicum Beach, Vancouver Is., B.C., barn swallow nests, reared; July 16-26, 1982; coll. N.K. Dawe & R.A. Cannings.

Chironomidae

*Cricotopus myriophylli* Oliver 1984, Can. Entomol. 116(10):1287. *ENT990-383*; Paratype; near Fintry, Okanagan Lake, B.C.; Sept. 18, 1980; coll. I. McDougall: *ENT990-384*; Paratype; Wood Lake, British Columbia; July 23, 1983; coll. D.R. Oliver and B. Kangasniemi: *ENT990-385*; Paratype Okanagan Lake, British Columbia; June 22, 1982; coll. B. Kangasniemi.

Mycetophilidae

*Tetragoneura fallax* Sherman 1921, Proc. Ent. Soc. Brit. Columbia 16:20. *ENT990-388*; Paratype; Stanley Park, Vancouver British Columbia; May 20, 1917; (missing abdomen).

Syrphidae

*Paragus variabilis* Vockeroth 1986, Can. Entomol. 118(3):193. *ENT990-390*; Paratype; Vancouver, B.C.; June 14, 1936; coll. J.K. Jacob: *ENT990-391*; Paratype; Goldstream, Vancouver Island, B.C.; June 2, 1918; coll. W. Downes: *ENT990-392* & *ENT990-393*; 2 Paratypes; Cranbrook, B.C.; Aug. 15, 1928; coll. A.A. Dennys.

*Platycheirus hispidipes* Vockeroth 1990, Can. Entomol. 122(7/8):697. *ENT990-398*; Paratype; Michel, Wilson Creek, B.C., elev. 5000ft.; Aug. 21;(year of collection not recorded).

*Platycheirus nearcticus* Vockeroth 1990, Can. Entomol. 122(7/8):711. *ENT990-399*; Paratype; Vancouver B.C.; July 1, 1903.

*Platycheirus octavus* Vockeroth 1990, Can. Entomol. 122(7/8):719. *ENT990-400*; Paratype; Cranbrook, B.C.; May 11;(year of collection not recorded)

*Platycheirus orarius* Vockeroth 1990, Can. Entomol. 122(7/8):720. *ENT990-401*; Paratype; Woods Hole, Massachusetts; Oct. 1, 1904.

*Platycheirus stegnoides* Vockeroth 1990, Can. Entomol. 122(7/8):738. *ENT990-394*; Paratype; Victoria, Vancouver Island, B.C.; May 23, 1908: *ENT990-395*; Paratype; Goldstream, Vancouver Island, B.C.; July 4, 1908: *ENT990-396*; Paratype; Victoria, Vancouver Island, B.C.; July 21, 1908: *ENT990-397*; Paratype; Vancouver, B.C.; May 6, 1905: *ENT990-581*; Paratype; Lakelse Lake, Terrace, B.C.; June 8, 1985; coll. R.A. Cannings.

Tabanidae

*Hybomitra pechumani* Teskey & Thomas 1979, Can. Entomol. 111(3):346. *ENT991-133465*; Paratype; Lac La Hache, B.C.; July 15, 1973; coll. H.J. Teskey: *ENT991-133466*; Paratype; Lac La Hache, B.C.; July 15, 1973; coll. H.J. Teskey: *ENT991-133467*; Paratype; Horsefly, B.C.; July 14, 1973; coll. H.J. Teskey.

**Hemiptera**

Coreidae

*Coriomeris insularis* Dolling & Yonke 1976, Annals ent. Soc. Am. 69(6):1149. *ENT991-133485*; Paratype; Galiano Island, B.C.; Aug. 30, 1970; coll. G.G.E. Scudder.

Corixidae

*Callicorixa scudderi* Jansson 1978, Pan-Pac. Ent. 54(4):263. *ENT991-133487*; Paratype; 5 miles N of Little Fort, B.C.; July 25, 1969; coll. A. Jansson.

*Cenoconixa columbiensis* Lansbury 1960, Proc. Ent. Soc. B.C. 57:38. *ENT991-133486*; Paratype; Vancouver, B.C., pond on grounds of the University of British Columbia; Oct. 12, 1928; coll. J. Waterfield.

Miridae

*Dacerla downesi* Knight 1927, Ent. News 38:314. *ENT991-133489*; Paratype; Mount Hood, Oregon, elev. 6000 ft.; July 29, 1921; coll. W. Downes.

*Deraeocoris franserensis* Razafimahatrata & Lattin 1982, Pan-Pac. Ent. 58:352. *ENT991-133488*; Paratype; Quesnel B.C.; June 18, 1949; coll. G.J. Spencer.

**Homoptera**

Cicadellidae

*Colladonus arctostaphyli* Downes 1952, Can. Ent. 84(8):253. *ENT991-133479*; Paratype; Malahat, B.C.; Aug. 29, 1937; coll. W. Downes: *ENT991-133480*; Paratype; Malahat, B.C.; Sept. 21, 1938; coll. W. Downes: *ENT991-133481*; Paratype; Malahat, B.C.; Aug. 17, 1938; coll. W. Downes.

*Cuerna cuesta* Hamilton 1970, Can. Entomol. 102(4):435. *ENT991-133482*; Paratype; Soda Creek, B.C.; Aug. 19, 1949; coll. G.J. Spencer: *ENT991-133483*; Paratype; Soda Creek, B.C.; Aug. 11, 1949; coll. G.J. Spencer.

*Evacanthus grandipes* Hamilton 1983, Can. Entomol. 115(5):506. *ENT990-530* & *ENT990-532*; 2 Paratypes; Cowichan, Vancouver Island, B.C.; Aug. 15, 1948; coll. W. Downes: *ENT990-531*; Paratype; Cowichan, Vancouver Island, B.C.; Aug. 17, 1948; coll. W. Downes: *ENT990-533* to *ENT990-534*; 2 Paratypes; Cowichan, B.C.; Aug. 12, 1948; coll. W. Downes: *ENT990-535*; Paratype; Saanich District, Vancouver Island, B.C.; July 8, 1920; coll. W. Downes: *ENT990-536*; Paratype; Saanich District, Vancouver Island, B.C.; June 18, 1918; coll. W. Downes: *ENT990-537*; Paratype; Duncan, Vancouver Island, B.C.; June 27, 1920; coll. W. Downes: *ENT991-133468*; Paratype; Victoria, B.C.; June 29, 1918; coll. W. Downes: *ENT991-133469*; Paratype; Stewart, B.C.; July 31, 1979; coll. G.G.E. Scudder: *ENT991-133470* & *ENT991-133471*; 2 Paratypes; Skedans, Louise Is., Queen Charlotte Islands, B.C.; July 3, 1981; G.G.E. Scudder: *ENT991-133472*; Paratype; Thormanby Island, B.C.; Aug. 8, 1925; coll. unknown.

Delphacidae

*Achrotile distincta* Scudder 1963, Can. Ent. 95(2):168. *ENT991-133476*; Paratype; Chilcotin, B.C.; May 30, 1959; coll. G.G.E. Scudder: *ENT991-133477*; Paratype; Westwick Lake, Cariboo, B.C.; June 23, 1961; coll. G.G.E. Scudder: *ENT991-133478*; Paratype; Springhouse, Cariboo, B.C.; May 28, 1959; coll. G.G.E. Scudder.

*Laccocera lineata* Scudder 1963, Can. Ent. 95(2):174. *ENT991-133473* & *ENT991-133475*; 2 Paratypes; Chilcotin, B.C.; May 30, 1959; coll. G.G.E. Scudder: *ENT991-133474*; Paratype; Chilcotin, B.C.; May 26, 1959; coll. G.G.E. Scudder.

**Hymenoptera**

Apidae

*Andrena columbiana* Viereck 1917, Amer. Ent. Soc. Trans. 43:374. *ENT990-582*; Paratype; Mission, B.C.; Aug. 8, 1904;

Braconidae

*Atanycolus anocomidis* Cushman 1931, Proc. U. S. Nat. Mus. 79(2880):14. *ENT990-583*; Paratype; Tod Inlet, Vancouver Island, B.C.; May 26; coll. G.A. Hardy.

*Helconidea necydalidis* Cushman 1931, Proc. U.S. Nat. Mus. 79(2880):10. *ENT990-585*; Paratype; Mt. Douglas, Saanich, B.C.; Nov. 22, 1925; coll. G.A. Hardy.

Tenthredinidae

*Dolerus similis* (Norton) var. *conjectus* Ross 1931, Illinois Biol. Monog.12:284. *ENT990-587*, *ENT990-589*, *ENT990-592* & *ENT990-594*; 4 Paratypes; Creston, B.C.; May 18, 1923; coll. C.B. Twigg: *ENT990-588*; Paratype; Vernon, B.C.; June 2, 1926; coll. E.R. Buckell: *ENT990-590* & *ENT990-591*; 2 Paratypes; Creston, B.C.; July 2, 1926; coll. A.A. Dennys: *ENT990-593*; Paratype; Creston, B.C.; July 9, 1926; coll. A.A. Dennys: *ENT990-595*; Paratype; Oliver, B.C.; May 16, 1923; coll. C.B. Garrett.

*Zaschizonyx montana* (Cresson) ssp. *occidentalis* Ross 1929, Can. Entomol. 61(12):272. *ENT990-596*; Paratype; Vernon, B.C.; May 8, 1907:

*ENT990-597*; Paratype; Vernon, B.C.; April 30, 1925; coll. M.H. Ruhmann: *ENT990-598*; Paratype; Vernon, B.C.; May 29, 1908: *ENT990-599*; Paratype; Vernon, B.C.; May 18, 1917.

**Lepidoptera**

Gelechiidae

*Aristotelia nigrobasiella* Clarke 1932, Can. Entomol. 64(3):63. *ENT990-559* to *ENT990-562*; 4 Paratypes; Saanichton, B.C.; May 10, 1923; coll. Capt. Wise.

*Gelechia abactella* Clarke 1932, Can. Entomol. 64(3):68. *ENT990-558*; Paratype; Kaslo, B.C.; Aug. 3, 1931.

Geometridae

*Dysstoma colvillei* Blackmore 1926, Can. Entomol. 58(4):100. *ENT990-572*; Female Paratype; Quamichan Lake, B.C.; June 22, 1923; coll. A.W. Hanham.

*Eulype albodecorata* Blackmore 1920, Can.Entomol. 52(12):269. *ENT991-85530*; Paratype; Goldstream, B.C.; June 7, 1916; coll. E.H. Blackmore.

*Hydriomena grandis* Hulst var. *saawichata* Swett 1915, Can. Entomol. 47(5):157. *ENT990-573*; Female Paratype; Victoria, B.C.; June 16, 1914; coll. E.H. Blackmore. (original label and published description say *saawichata*: Ferguson, in Hodges et al (1983) lists as a misspelling of saanichata).

*Nomenia obsoleta* Swett 1916, Can. Entomol. 48(7):249. *ENT990-580*; Male Paratype; Victoria, B.C.; April 19, 1908.

*Stamnodes blackmorei* Swett 1915, Can. Entomol. 47(5):155. *ENT990-575*; Cotype; Victoria, B.C.; coll. E.H. Blackmore.

*Tephroclystis harlequinaria* Dyar 1905, Proc. Entomol. Soc. Wash. 7:29. *ENT990-570*; Type; May 20, 1903.(left forewing and left hindwing missing).

*Xanthorhoe atlinensis* Swett 1918, Can. Entomol. 50(1):19. *ENT990-574*; Paratype; Atlin, B.C.; June 28, 1914.

*Xanthorhoe clarkeata* Ferguson 1987, J. Lepid. Soc. 41(2):98-103. *ENT987-531* to *ENT987-534*; 4 Paratypes; Mt. Brown, Graham Island, Queen Charlotte Islands, ridge W. of Mt. Brown, elev. 3100 ft.; July 27, 1985; coll. J.F.G. Clarke.

*Xanthorhoe defensaria* (Gn.) var. *conciliaria* Swett 1916, Can. Entomol. 48(10):352. *ENT990-579*; Female Paratype; Victoria, B.C.; Aug. 8, 1915; coll. E.H. Blackmore.

*Xanthorhoe defensaria* (Gn.) var. *gigantaria* Swett 1916, Can. Entomol. 48(10):353. *ENT990-576*; Female Paratype; Victoria, B.C.; July 3, 1914; coll. E.H. Blackmore: *ENT990-577*; Male Paratype; Victoria, B.C.; April 13, 1903.

*Xanthorhoe defensaria* (Gn.) var. *thanataria* Swett 1916, Can. Entomol. 48(10):352. *ENT990-578*; Male Paratype; Victoria, B.C.; Aug. 8, 1915; coll. E.H. Blackmore.

Lycaenidae

*Plebejus icarioides* Bdv. var. *montis* Blackmore 1923, Can. Entomol. 55(4):99. *ENT990-555*; Female Paratype; Mt. McLean, Lillooet, B.C., elev. 5500 ft; Aug. 21, 1920; coll. A.W. Hanham: *ENT990-556*; Male Paratype; Mt. McLean, Lillooet, B.C., 5500 ft.; Aug. 21, 1920; coll. A.W. Hanham.

Noctuidae

*Acronicta fragilis* Gn. ssp. *fragiloides* (B. & Benj.) 1924, Contrib. Nat. Hist. Lepidoptera 5(3):149. *ENT990-571*; Female Paratype; Duncan, B.C.; July 7, 1914; coll. A.W. Hanham.

*Bombycia fasciata* B. and McD. 1910, J.N.Y. Entomol. Soc. 18:160. *ENT990-563*; Female Cotype; Duncan, Vancouver Island, B.C.; coll. A.W. Hanham.

*Caenurgina erechtea* Cram. f. *parva* Blackmore 1920, Can. Entomol. 52(12):266. *ENT990-565*; Female Paratype; Victoria, B.C.; April 18, 1913; coll. E.H. Blackmore.

*Eremobina hanhami* B. & Benj. 1924, Contrib. Nat. Hist. Lepidoptera of North America 5(3):146; *ENT991-133458*; Female Paratype; Duncan, B.C.; Aug. 13, 1920; coll. A.W. Hanham.

*Litholomia napaea* Morr. ssp. *umbrifasciata* Blackmore 1923, Can. Entomol. 55(9):216. *ENT990-567*; Male Paratype; Victoria, B.C.; Mar. 31, 1915: *ENT990-*

*569*; Male Paratype; Victoria, B.C.; June 1, 1916: *ENT990-568*; Female Paratype; Victoria, B.C.; April 10, 1915; E.H. Blackmore coll. all types.

*Oncocnemis parvanigra* Blackmore 1923, Can. Entomol. 55(9):215. *ENT990-564*; Female Paratype; Mt. McLean, B.C., elev. 5,500 ft.; Aug. 14, 1921; coll. A.W. Hanham. (missing left forewing).

*Porosagrotis vetusta* Wlk. ssp. *mutata* B. & Benj. 1924, Contrib. Nat. Hist. Lepidoptera 5(3):107. *ENT990-566*; Male Paratype; Vernon, B.C.; Aug. 30, 1916; coll. E.H. Blackmore.

Papilionida

*Papilio machaon* L. ssp. *pikei* Sperling 1987, Quaest. Ent. 23(2):219. *ENT988-1710*; Male Paratype; Taylor, B.C.; June 21, 1982; coll. F. Sperling: *ENT988-1711*; Female Paratype; Taylor, B.C.; June 21, 1982; coll. F. Sperling.

Pyralidae

*Aglossa furca* Hein. 1931, Proc. U.S. Nat. Mus. 79(2879): Art. 13:5. *ENT990-557*; Paratype; Aug. 9, 1925. (abdomen and left hindwing missing).

Tortricidae

*Epinotia seorsa* Heinrich 1924, J. Wash. Acad. Sci. 14:392. *ENT991-133490*; Paratype; Quamichan Lake, Vancouver Is., B.C.; Sept. 9, 1915; coll. A. W. Hanham; head, abdomen, most of thorax and left hindwing missing.

## Odonata

Coenagrionidae

*Acanthagrion speculum* Garrison 1985, Odonatologica 14(1):37. *ENT991-56751 & ENT991-56751*; Female Paratype & Male Paratype; 1.5 miles S of Puerto Viejo, Finca La Selva, Heredia, Costa Rica, elev. 200 ft; July 1, 1967; coll. D.R. Paulson and M.L. Paulson.

*Enacantha caribbea* Donnelly & Alayo 1966, Fla Ent. 49:110. *ENT990-601*; Male Paratype; Chiapas, Ixtapa, Mexico, at pond 6.3 miles S of Ixtapa, elev. 3700 ft; July 17, 1965; coll. D.R. Paulson & F.G. Thompson.

Gomphidae

*Gomphus gonzalezi* Dunkle 1992, Odonatologica 21:79. *ENT991-133456*; Male Paratype; Falcon Dam, Rio Grande River, Texas, U.S.A.; April 11, 1990; coll. R.A. Cannings. *ENT991-133457*; Female Paratype; Falcon Dam, Rio Grande River, Texas, U.S.A.; April 11, 1990; coll. R.A. Cannings.

*Gomphus lynnae* Paulson 1983, Odonatologica 12(1):60. *ENT990-600*; Male Paratype; 9 miles N of Benton City, Yakima River, Washington, U.S.A.; July 17, 1971; D.R. Paulson and M.L. Paulson.

*Phyllogomphoides pugnifer* Donnelly 1979, Odonatologica 8(4):261. *ENT991-56750*; Male Paratype; 20.1 kilometers N of Ocozocoautla, Chiapas, Mexico, elev. 2000 ft.; Aug. 25, 1967; coll. D.R. Paulson and M.L. Paulson.

*Progomphus bellei* Knopf & Tennessen 1980, Odonatologica 9(3):247-252. *ENT988-15779*; Paratype; Juniper Creek, Calhoun County, Florida, U.S.A., Hwy. 20, 20 yards S of bridge; June 29, 1974; coll. K.J. Tennessen.

Libellulidae

*Sympetrum signiferum* Cannings & Garrison 1991, Ann. Ent. Soc. Amer. 84(5):474. *ENT991-13906* Male Paratype; Rio Dalila River and marshes 6 miles E of Durango, Mexico, elev. 6200 ft; Sept. 1, 1976; coll. D.R. Paulson and S. Hills. *ENT991-13907*; Female Papratype; Rio Dalila River and marshes 6 miles E of Durango, Mexico, elev. 6200 ft; Sept. 1, 1976; coll. D.R. Paulson and S. Hills.

Megapodagrionidae

*Philogenia minteri* Dunkle 1986, Odonatologica 15(1):43. *ENT990-602*; Male Paratype; Limoncocha, Prov. Napo, Ecuador, forest trail; Feb. 15, 1972; coll. D.L. Pearson: *ENT990-502*; Female Paratype; Limoncocha, Prov. Napo, Ecuador, forest trail; Mar. 1, 1972; coll. D.L. Pearson.

## DIPLOPODA

*Metaxycheir pacifica* Shelley 1990, Can. J. Zool. 68(11):2311. *ENT990-1*; Holotype; rain forest litter; Port Renfrew, Vancouver Island, B.C.;July 31, 1989; coll. R.M. Shelley

*Nemasoma leechi* Chamb. 1952, Nat. Hist. Misc. 87:10 *BCPM 979-11377-1*; 4 Types; Trinity Valley, B.C., 50° N, 118° W, under board; Sept. 16, 1943: *BCPM 979-11379-1*; 5 Types; B.C. "probably from Cariboo"; 1946; coll. H.B. Leech.

*Opiona columbiana* Chamb. 1952, Nat. Hist. Misc. 87:9. *ENT987-530*; Male Holotype; Victoria, B.C.; 1949.

*Zygotyla phana* Chamb. 1952, Nat. Hist. Misc. 87:7. *BCPM 979-11378-1*; Type; Blue River, B.C.; Sept. 9, 1948; coll. C.E. French.

## MOLLUSCA
## AMPHINEURA
### Polyplacophora

Mopaliidae

*Mopalia spectabilis* Cowan and Cowan 1977, Syesis 10:46. *BCPM 979-10593*; 12 Paratopotypes; Navy Channel, Mayne Island, B.C., 48°N, 123°W, 0 tide to —1 m.; July-Aug. 1974-1975; coll. J.S. and I. McT. Cowan.

Ischnochitonidae

*Ischnochiton abyssicola* Smith and Cowan 1966, Occas. Pap. Calif. Acad. Sci. 56:4. *BCPM 979-5299*; Paratype; S. of Semidi Islands, Aleutians, 55° 15' N, 188° W, 140-118 fms, gravel bottom; Aug. 1964; coll. G. McT. Cowan: *BCPM 979-5369*; Paratypes (broken shells); off Swiftsure Bank, Wash., U.S.A., 48°02'N, 125°45.2'W, sta. 835, 534 fms, gravel bottom; Sept. 6, 1964; coll. I. McT. Cowan and D.B. Quayle: *BCPM 979-5375*; 4 Paratypes (juveniles); off Swiftsure Bank, Wash., U.S.A., 48° 02' N, 125° 45.2' W, sta. 835, 534 fms, on rocks; Sept. 6, 1964; coll. I. McT. Cowan and D.B. Quayle: *BCPM 979-5538*; Paratype; W.N.W. of Triangle Island, Queen Charlotte Sound, B.C., sta. 863, haul 63-214, 51° 09' N, 130° 09' W, 470-480 fms; Sept. 11, 1964; coll. D.B. Quayle.

## GASTROPODA
## PROSOBRANCHIA
### Archaeogastropoda

Fissurellidae

*Fissurisepta pacifica* Cowan 1969, The Veliger 12(1):24. *BCPM 979-6522*; Holotype; off Triangle Island, B.C., 51°09'N, 130°09'W, sta. 863, 470-480 fms; Sept. 11, 1964; coll. D.B. Quayle.

*Puncturella decorata* Cowan and McLean 1968, The Veliger 11(2):105. *BCPM 979-6764*; Cotype; Bjorka Island, near Sitka, Alaska; 110-117 fms; Sept. 5, 1966; coll. G. McT. Cowan: *BCPM 979-7283 a & b*; 2 Paratypes; W. coast of Queen Charlotte Islands, B.C., 53°21.3'N, 133°04.1'W, 106 fms; Aug. 11, 1967; coll. F. Bernard.

### Neogastropoda

Buccinidae

*Neptunea stilesi* A.G. Smith 1968, The Veliger 11(2):117. *BCPM 979-1540*; 2 Paratypes; Hakai Pass, B.C., 34 fms; Nov. 1960; coll. H. McBride.

Turridae

*Mangilia arteaga* Dall & Bartsch 1910, Can. Dept. Mines, Geol. Survey Branch, Memoir 14-N:11. *BCPM 979-1522*; 9 Cotypes; Amphitrite Point, Vancouver Island, B.C., 48° N., 125° W; 1909; coll. C.H.Young & W.Spreadborough. (Specimen labelled *Lora arteaga*, no such species found in lit. locality data, date, collectors etc. matches that for types of *Mangilia arteaga*)

## OPISTHOBRANCHIA
### Nudibranchia

Doridiidae

*Aldisa albomarginata* Millen & Gosliner 1985, Zool. J. Linn. Soc. 84(3):196. *BCPM 982-104-1*; 2 Paratypes; Earl's Cove, Agamemnon Channel, B.C., 49°45'N, 124°01'W, 7 m.; June 12, 1982; coll. S. Millen. *BCPM 982-322-1*; paratype; Earl's Cove, Sechelt Peninsula, B.C., 16 m; Oct 30, 1982; coll. S. Millen.

*Aldisa tara* Millen & Gosliner 1985, Zool. J. Linn. Soc. 84(3):212 *BCPM 982-126-1*; 2 Paratypes; Earl's Cove, Agamemnon Channel, B.C., 49° 45'N, 124° 01'W, 15 m.; June 9, 1980; coll. S. Millen.

*Anisodoris lentiginosa* Millen 1982, Can. J. Zool. 60(11):2694. *BCPM 973-7-10*; 2 Paratypes; E. side of Helby Island, Barkley Sound, B.C., 48° 52.3' N, 125°09.7'W, 15-20 ft.; Feb. 20, 1973; coll.P. Lambert: *BCPM 973-246-23*; 1 Paratype; Galley Rock, Peacock Channel, Broken Group, Barkley Sound, B.C., 48° 55.9'

N, 125° 17.8′ W, 15 m., rock-gravel slope; Aug. 22, 1973; coll. P. Lambert and B. Cooke: *BCPM 982-105-1*; 2 Paratypes; N.E. side of Diana Island, Barkley Sound, B.C., 48°N, 125°W, 3-6 m., large rocks; Nov. 17, 1972; coll. A. Peden.

Onchidoridiidae

*Adalaria jannae* Millen 1987, Can. J. Zool. 65(11):2696. *RBCM 987-32-1*; 5 Paratypes + spawn; Chup Pt., Barkley Sound, Vancouver Island, B.C., 48°57.3′N, 124°0.02′W, 3-4 m.; Aug. 20, 1987; coll. S. Millen.

*Diaphorodoris lirulatocauda* Millen 1985, Veliger 28(1):85. *BCPM 984-347-1*; Holotype; Earl's Cove, B.C., 49°45′N, 124°01′W, 20 m., rock (*Rhabdocalyptus*); June 5, 1979; coll. S. Millen: *BCPM 976-1037-6*; 3 Paratypes; rock islets E of Murchison Island, Juan Perez Sound, Queen Charlotte Islands, 52° 35.8′ N, 131° 25.2′ W, < 60 ft., solid rock with coralline algae; Mar. 27, 1976; coll. P. Lambert: *BCPM 976-1056-5*; 4 Paratypes; Arbutus Island, Satellite Chan., B.C., 48° 42.4′ N, 123° 26.1′ W, < 50 ft., rock, sand-shell patches; June 18, 1976; coll. P. Lambert: *BCPM 976-1073-10*; 7 Paratypes; Otter Cove, near Beaver Rock, Discovery Passage, B.C., 50° 19.7′ N, 125° 26.4′ W, < 75 ft., rock covered with hydroids; Aug. 2, 1976; coll. P. Lambert.

Cuthonidae

*Cuthone punicea* Millen 1986, Can. J. Zool. 64(6):1356. *BCPM 985-525-1*; 5 Paratypes; Plumper Rock, Weyton Passage, B.C., 50°36′N, 126°49′W, 13 m., rocky; May 6, 1985; coll. S. Millen.

Atyidae

*Haminoea callidegenita* Gibson & Chia 1989, Can. J. Zool. 67(4):915. *RBCM 988-26-1*; Holotype; Spencer's Spit, Lopez Island, Wash., U.S.A., 0.25 m.; Oct. 11, 1986; coll. G. Gibson: *RBCM 988-26-2*; 10 Paratypes; Spencer's Spit, Lopez Island, Wash., U.S.A., 0.25 m.; Oct. 11, 1986; coll. G. Gibson: BCPM *988-26-3*; 14 Paratypes; Spencer's Spit, Lopez Island, Wash., U.S.A., 0.25 m.; Oct. 11, 1986; coll. G. Gibson; (dry, shells only).

PELECYPODA

**Veneroida**

Galeommatidae

*Scintillona bellerophon* O. Foighil and Gibson 1984, The Veliger 27(1):73. *BCPM 983-1617-1*; Holotype; Woodward Pt., Sooke Harbour, Vancouver Island, B.C., 48°N, 123°W, intertidal, attached to *Leptosynapta clarki*, coarse silt with *Ulva* cover; Sept. 5, 1983; coll. D.O. Foighil and A. Gibson: *BCPM 983-1617-2*; Paratype; Woodward Pt., Sooke Harbour, Vancouver Island, B.C., 48°N, 123°W, intertidal, attached to *Leptosynapta clarki*, coarse silt with *Ulva* cover; Sept. 5, 1983; coll. D.O. Foighil and A. Gibson.

Kellidae

*Aligena* (*Odontogena*) *borealis* Cowan 1964. The Veliger 7(2):108. *BCPM 979-4762*; 7 Paratypes; Georgia Strait, 49° 50′ N, 124° 50′ W, 190 fms; May 18, 1963; coll. I. McT. Cowan.

Tellinidae

*Macoma elimata* Dunnill & Coan 1968, Nat. Mus. Can. Nat. Hist. Papers 43:1. *RBCM 989-299-1*; Paratype; Moresby Island, Satellite Channel, B.C., 48°44′N 120°19′W, 42 meters.

Veneridae

*Paphia bifurcata* Quayle 1938, J. Fish. Res. Board Can. 4(1):53. *BCPM 978-206-1*; 7 Paratypes; Ladysmith Harbour, B.C.; Mar. 21, 1938; coll. D.B. Quayle.

Vesicomyacidae

*Calyptogena kilmeri* Bernard 1974, Stud. Fish. Res. Board Can. 1974:1988. *BCPM 979-7321*; Paratype; W. of Moresby Island, Queen Charlotte Islands, B.C., 53° 01′ N, 132° 50′ W; Aug. 1967; coll. F.R. Bernard.

**Ostreoida**

Pectinidae

*Cyclopecten carlottensis* Bernard 1968, J. Fish. Res. Board Can. 25(7):1509. *BCPM 979-7243*; Paratype; off Moresby Island, Queen Charlotte Islands, B.C., 52° 59′ N, 133° 06′ W, 1650 m.; Oct. 20, 1966; coll. F. Bernard.

**Mytiloida**

Mytilidae

*Musculus pygmaea* Glynn 1964, The Veliger 7(2):121. *BCPM 979-5040*; 17 Paratypes; Pacific Grove, California, 36° 37′ N, 121° 57′ W, "on tuft of alga *Endocladia muricata*"; Mar. 4, 1962; coll. P. Glynn.

**Nuculoida**

Malletiidae

*Malletia abyssopolaris* A.H. Clarke 1960, Breviora 119:7. *BCPM 979-2056*; 3 Paratypes; Stn. Alpha, 800 mi. N. of Pt. Barrow, Alaska, 1,208 fms; July 7, 1958; coll. K. Hunkins.

**Septibranchida**

Cuspidariidae

*Cuspidaria cowani* Bernard 1967, J. Fish. Res. Board Can. 24(12):2629. *BCPM 979-7170*; Paratype; W. of Moresby Island, Queen Charlotte Islands, B.C., 52° 30′ N, 131° 55′ W, 1,318 m., F.R.B. sta. 66-70; Oct. 17, 1966; coll. F. Bernard.

ECHINODERMATA
HOLOTHUROIDEA

Stichopodidae

*Parastichopus leukothele* Lambert 1986, Can. J. Zool. 64:2268. *RBCM 976-1043-13*; Paratype; Horn Island, Tasu Sound, Moresby Island, Queen Charlotte Islands, B.C., 52° 45.9′ N, 132°03.5′W, 24 m.; Mar. 31, 1976; coll. P. Lambert.

# VERTEBRATES

PISCES
CYCLOSTOMATA
**Petromyzoniformes**

*Lampetra richardsoni* Vladykov & Follett 1965, J. Fish. Res. Board Can. 22(1):143. *RBCM 569*; 7 Paratypes; Smith Creek, Cultus Lake, B.C.; May 30, 1942; coll. G.C. Carl: *RBCM 453*; 3 Paratypes; Holmes Creek, near Duncan, Vancouver Island, B.C.; May 8, 1939; coll. G.C. Carl.

OSTEICHTHYES
**Gadiformes**

Zoarcidae

*Lycodapus poecilus* Peden and Anderson 1981, Can. J. Zool. 59(4):673. *BCPM 980-595*; 23 + 1 head, paratypes; Bering Sea, 54°31.63′N, 165°49.50′W; Aug. 18, 1980; coll. A. Peden. *BCPM 980-24*; paratype; Bering Sea, 59°22′N, 178°02′W; July 19, 1979; coll. J. Rose on M/V Discovery Bay.

*Pachycara lepinium* Anderson and Peden 1988, Proc. Calif. Acad. Sci. 46(3):91. *BCPM 980-99*; paratype; directly W of Tasu, Queen Charlotte Islands, B.C., 2780 m; Aug. 26, 1979; coll. R. Scarsbrook: *BCPM 980-100*; paratype; directly W of Tasu, Queen Charlotte Islands, B.C., 2926 m; Aug. 1979; coll. m/v Eastward Ho.

*Pachycara gymninium* Anderson and Peden 1988, Proc. Calif. Acad. Sci. 46(3):88. *BCPM 979-11365*; 2 paratypes; W of Tasu Snd., Queen Charlotte Islands, B.C., 2,744 m; Aug. 16, 1979; coll. R. Scarsbrook: *BCPM 979-11369*; 6 paratypes; W of Tasu Sound, Queen Charlotte Islands, B.C., 2,889 m; Aug. 22, 1979; coll. R. Scarsbrook

**Perciformes**

*Alectrias mutsuensis* Shiogaki. Jap. J. Ichthyology 32(3):305. *RBCM 986-23*; Paratype; off Moura Island, Japan, 20-40 m., muddy bottom; June 2, 1978; coll. M. Shiogaki: *RBCM 986-24*; Paratype; off Moura Island, Japan; Nov. 26, 1979; coll. M. Shiogaki: *RBCM 986-25*; Paratype; off Moura Island,Japan; Nov. 26, 1979; coll. M. Shiogaki: *RBCM 986-26*; Paratype; off Moura Island, Japan; Nov. 26, 1979; coll. M. Shiogaki: *RBCM 986-27*; Paratype; off Moura Island, Japan; Nov. 26, 1979; coll. M. Shiogaki.

**Scorpaeniformes**

Agonidae

*Agonomalus mozinoi* Wilimovsky and Wilson 1978, Syesis 11:73. *BCPM 976-1363*; Paratype; Wizard Islet, opposite Bamfield, Barkley Sound, B.C., 48°51.6′N, 125°09.4′W, 20-30 ft.; July 14, 1976; coll. A. Peden.

Liparidae

*Acantholiparis caecus* Grinols 1969, J. Fish. Res. Board Can. 26(5):1237. *BCPM 971-197*; Paratype; Pacific Ocean, 45° 54′ N, 125° 05′ W, 850 fms; Jan. 9, 1964; coll. m/v Commando.

*Neoliparis greeni* Jordan and Starks 1895, Contrib. Biol. Hopkins Lab. Biol. 3:829. Holotype; Victoria Harbour, B.C.[The holotype was reported by Clemens and Wilby (1946, Fish. Res. Board Can. Bull. #68) as being in the B.C. Provincial Museum collection. However, the original describers note its presence at Stanford University (SU 3019) and we have examined the specimen ourselves at the California Academy of Science where the Stanford collection is now housed.]

*Osteodiscus cascadiae* Stein 1978, Occas. Pap. Calif. Acad. Sci. 127:24. *BCPM 975-201*; Paratype; off the coast of Oregon, U.S.A., 44° 42.5′-44° 38.9′ N, 125° 35.6′-125° 36.3′ W, 2,779 m.; Oct. 5, 1969;m/v Yaquina: *BCPM 975-202*; Paratype; off the coast of Oregon, U.S.A., 44°41.7′-44°43.6′N, 125°33.5′-125°32.5′W; Oct. 6, 1969; coll. m/v Yaquina: *BCPM 975-203*; Paratype; off the coast of Oregon, U.S.A., 44°41.7′-44°43.6′ N, 125° 33.5′-125°32.5′W; Oct. 6, 1969; coll. m/v Yaquina.

*Paraliparis pectoralis* Stein 1978, Occas. Pap. Calif. Acad. Sci. 127:49. *BCPM 971-193*; Paratype; off the coast of Oregon, U.S.A., 45°38.8′N, 124°55′W, 750 fms; May 14, 1963; m/v Commando: *BCPM 971-203*; Paratype; off Oregon, U.S.A.; AEC Sta. 24, 45° 35′N, 124° 53′ W, 750 fms; May 28, 1964; coll. U.S. Atomic Energy Commission.

Zaproridae

*Zaprora silenus* Jordan 1896, Proc. Calif. Acad. Sci., ser. 2, 6:203. *BC 95-4*; Holotype; Nanaimo Harbour, Vancouver Island, B.C.; Nov. 1895; coll. G. Marsh.[No longer in Royal B.C. Museum collection; sent to the National Museums of Canada, Oct. 18, 1976 (*NMC 76-0443*).]

## AMPHIBIA

Ascaphidae

*Ascaphus truei* Stejn. ssp. *montanus* Mittlemand and Myers 1949, Proc. Biol. Soc. Wash. 62:57. *BCPM 692*; Male Paratype; Cascade Creek, 5 mi. N.W. of Hatzic, B.C., 49° N, 122° W; June 28, 1942; coll. K. Graham.

## AVES

### Galliformes

Tetraonidae

*Lagopus leucurus* ssp. *saxatilis* Cowan 1939, The Condor 41:82. *BCPM #8324*; Type; Mt. Arrowsmith, Vancouver Island, B.C.; Sept. 11, 1938; coll. I. McT. Cowan and P.W. Martin.

### Passeriformes

Turdidae

*Hylocichla guttata* ssp. *vaccinia* Cumming 1933, Murrelet 14:79. *BCPM #7647*; Holotype; Seymour Mt., Vancouver, B.C.; July 27, 1933; coll. R.A. Cumming.

Vireonidae

*Vireo huttoni* ssp. *insularis* Rhoads 1893, Auk 10(3):239. *BCPM #1074*; Female Type; Victoria, B.C.; Feb. 12, 1891: Male type; Victoria, B.C.; Feb. 12, 1891; coll. A.H. Maynard.

## MAMMALIA[1]

### Artiodactyla

Bovidae

*Ovis fannini* Hornaday 1901, Fifth Ann. Rep. N.Y. Zool. Soc. App. 1:2. *BCPM #1485*; Type; Dawson City, Yukon Territory; adult male, mounted specimen; Oct. 1900; coll. H.W. Brown.

Cervidae

*Rangifer dawsoni* Seton 1900, Ottawa Nat. 13:257. *BCPM #1483*; Type; near Masset, Graham Island, Queen Charlotte Islands, B.C.; adult male, cranium and right antler; approximately 1882; coll. W.M. Charles.

[1]Rodent paratypes are not identified in the mammal collections, although several specimens should have had such status.

**Carnivora**

Canidae

*Canis lupus* L. ssp. *columbianus* Goldman 1941, Proc. Biol Soc. Wash. 54:110. *BCPM #3559*; Type; Wistaria, N side of Ootsa Lake, Coast District, B.C.; adult male, skull only; Nov. 1938; coll. J.C. Shelford.

Ursidae

*Ursus kermodei* Hornaday 1905, Ninth Ann. Rep. N.Y. Zool. Soc. 1904, 82. *BCPM #1369*; Type; Gribble (Gribbell) Island, B.C., 53°25'N, 129°W; young female, mounted skin, partial skull and mandible; May 1904.

**Lagomorpha**

Leporidae

*Lepus americanus* Erxleben ssp. *pallidus* Cowan 1938, J. Mamm. 19(2):240. *BCPM #4717*; Type; Chezacut Lake, Chilcotin River, B.C.; adult female, skin and skull; July 29, 1931; coll. K. Racey.

**Rodentia**

Arvicolidae

*Microtus townsendi* (Bach.) ssp. *cowani* Guiguet 1955, Ann. Rep. B.C. Prov. Mus. 1954:67. *BCPM #5460*; Type; adult female skin and skull; Triangle Island, B.C.; June 29, 1949; coll. C.J. Guiguet.

Cricetidae

*Peromyscus maniculatus* (Wagn.) ssp. *alpinus* Cowan 1937, Proc. Biol. Soc. Wash. 50:215. *BCPM #2266*; Type; adult male, skin and skull; Mount Revelstoke, B.C., elev. 6000 ft.; July 4, 1937; coll. I. McT. Cowan.

*Peromyscus maniculatus* (Wagn.) ssp. *balaclavae* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:197. *BCPM #3838*; Type; adult male, skin and skull; Balaclava Island, B.C.; June 12, 1939; coll. T.T. McCabe and E.B. McCabe.

*Peromyscus maniculatus* (Wagn.) ssp. *beresfordi* Guiguet 1955, Ann. Rep. B.C. Prov. Museum 1954:71. *BCPM #5575*; Type; adult male, skin and skull; Beresford Island, Scott Island Group, B.C.; June 21, 1950; coll. C.J. Guiguet.

*Peromyscus maniculatus* (Wagn.) ssp. *cancrivorus* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:195. *BCPM #2060*; Type; adult male, skin and skull, skin faded; Table Island, Queen Charlotte Sound, B.C.; June 9, 1937; coll. T.T. McCabe and E.B. McCabe.

*Peromyscus maniculatus* (Wagn.) ssp. *carli* Guiguet 1955, Ann. Rep. B.C. Prov. Mus. 1954:72. *BCPM #5608*; Type; adult female, skin and skull; Cox Island, off Cape Scott, B.C.; June 21, 1950; coll. C.J. Guiguet.

*Peromyscus maniculatus* (Wagn.) ssp. *doylei* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:196. *BCPM #3784*; Type; adult female skin and skull (no mandibles); Doyle Island, B.C.; June 24, 1939; coll. T.T. McCabe and E.B. McCabe.

*Peromyscus maniculatus* (Wagn.) ssp. *maritimus* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:199. *BCPM #3010*; Type; adult male, skin and skull; largest of Moore Islands, B.C.; Sept. 12, 1938; coll. T.T. McCabe and E.B. McCabe.

*Peromyscus maniculatus* (Wagn.) ssp. *pluvialis* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:199. *BCPM #3910*; Type; adult male, skin and skull; Goose Island, B.C.; July 11, 1939; coll. T.T. McCabe and E.B. McCabe.

*Peromyscus maniculatus* (Wagn.) ssp. *rubriventer* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:196. *BCPM #3888*; Type; adult female, skin and skull; Ruth Island, S.W. of Hunter Island; July 11, 1939; coll. I. McT. Cowan.

*Peromyscus maniculatus* (Wagn.) ssp. *sartinensis* Guiguet 1955, Ann. Rep. B.C. Prov. Mus. 1954:69. *BCPM #5632*; Type; adult male, skin and skull; Sartine Island, B.C.; June 22, 1950; coll. C.J. Guiguet.

*Peromyscus maniculatus* (Wagn.) ssp, *saxamanus* McCabe and Cowan 1945, Trans. R. Can. Inst. 25:198. *BCPM #3799*; Type; adult female, skin and skull; Duncan Island, B.C.; June 22, 1939; coll. T.T. McCabe and E.B. McCabe.

*Peromyscus maniculatus* (Wagn.) ssp. *triangularis* Guiguet 1955, Ann. Rep. B.C. Prov. Mus. 1954:69. *BCPM #5454*; Type; adult female, skin and skull; Triangle Island, B.C.; June 29, 1949; coll. C.J. Guiguet.

Geomyidae

*Thomomys talpoides* (Richardson) ssp. *cognatus* Johnstone 1954, Can. Field-Nat. 68:162. *BCPM #5827*; Type; adult female, skin and skull; Crowsnest Pass, B.C.; Sept. 30, 1951; coll. W.B. Johnstone: *BCPM #5828*; Paratype; adult female, skin and skull; Crowsnest Pass, B.C.; Sept. 30, 1951; coll. W.B. Johnstone.

*Thomomys talpoides* (Richardson) ssp. *segregatus* Johnstone 1954, Can. Field-Nat. 68:161. *BCPM #5825*; Type; adult male, skin and skull; Goat Mountain, near Wynndel, B.C.; Sept. 15, 1953; coll. W.B. Johnstone: *BCPM #5826*; Paratype; adult male, skin and skull; Goat Mountain, near Wynndel, B.C.; Sept. 15, 1953; coll. W.B. Johnstone.

Sciuridae

*Eutamias amoenus* Allen ssp. *septentrionalis* Cowan 1946, Proc. Biol. Soc. Wash. 59:110. *BCPM #1648*; Type; adult female, skin and skull; north side of Ootsa Lake, B.C.; July 24, 1938; coll. I. McTaggart Cowan.

*Glaucomys sabrinus* (Shaw) ssp. *reductus* Cowan 1937, Proc. Biol. Soc. Wash. 50:79. *BCPM #2394*; Type; adult male, skin and skull; Lonesome Lake, on Atnarko River, B.C., approx. 52° 10' N, 125° 45' W; Jan. 1936; coll. R.A. Edwards.

**Insectivora**

Soricidae

*Sorex obscurus* Merriam ssp. *insularis* Cowan 1941, Proc. Biol. Soc. Wash. 54:103. *BCPM 3110*; Type; adult female, skin and skull; Smythe Island; Aug. 24, 1938; T.T. McCabe and E.B. McCabe.

*Sorex obscurus* Merriam ssp. *calvertensis* Cowan 1941, Proc. Biol. Soc. Wash. 54:103. *BCPM 1947*; Type; adult male, skin and skull; Safety Cove, Calvert Island, B.C.; June 14, 1935; T.T. McCabe and E.B. McCabe.

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